This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) The system as set forth in claim ~~1~~ 22 wherein the main body portion of said transfer plate has a generally flat underside and said flexible lips are generally coplanar with said flat underside.

6. (Currently Amended) The system as set forth in claim ~~1~~ 22 comprising three flexible lips for each aperture, said lips positioned equally spaced around the aperture.

7. (Cancelled)

8. (Currently Amended) The system as set forth in claim 6 wherein the radially inner edges of the lips comprise circular arcs defining a diameter ~~approximately~~ equal to the diameter of the openings in the pipette holder.

9. (Currently Amended) The system as set forth in claim ~~8~~ 22 wherein said support structure comprises a plurality of legs extending ~~generally~~ perpendicular to the transfer plate and positioned between adjacent apertures.

10. (Currently Amended) The system as set forth in claim ~~1~~ 22 wherein the push plate comprises an upper body having a generally planar undersurface and an array of fingers extending downwardly from the undersurface arranged to align with and extend into the mounting sleeves of the tips

11. (Currently Amended) The system as set forth in claim 10 wherein each of said fingers comprises a tapered distal end sized to extend into the mounting sleeve of a tip, and a ~~generally cylindrical~~ proximal end sized to pass through a transfer tray aperture and forming at ~~the~~ a juncture with the distal end a shoulder adapted to engage the upper edge of the pipette tip mounting sleeve and push said upper edge past the flexible lips.

12. (Cancelled)

13. (Currently Amended) The method as set forth in claim ~~17~~ 23 wherein the pipette tips are of the type wherein the tapered tip end and the upper mounting sleeve are separated by an intermediate shoulder and including the step of supporting the tips by their intermediate shoulders on the flexible peripheral edge portions of the apertures in the transfer plate.

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (New) A reloading system for transferring one of a plurality of tiers of pipette tip arrays from a vertically stacked orientation to an empty pipette holder, said system comprising:

the pipette tips each having a lower tapered tip end, an upper mounting sleeve separated from the tip end by a shoulder, and the pipette holder having a flat support surface provided with an array of openings adapted to receive and hold the array of tips in a tip support position;

a transfer plate having a main body portion of uniform thickness and an array of apertures arranged to align with the array of openings in the pipette holder in a transfer position, each of the apertures having a peripheral edge portion including a plurality of flexible lips extending radially inwardly from the edges of the apertures, said lips adapted to support a pipette tip by its shoulder with the tip end extending downwardly through the aperture in the transfer plate;

a support structure formed integrally with and depending downwardly from the underside of the transfer plate and engageable with the transfer plate of the tier immediately below in the stacked orientation to prevent supporting contact between vertically adjacent tips;

said support structure operative to support the transfer plate on the flat support surface of the pipette holder in the transfer position; and,

a push plate adapted to overlie the transfer plate and to directly engage the mounting sleeves of the tips in the transfer position and push the same through the apertures, past and separated completely from the flexible lips and into the tip support position on the pipette holder.

23. (New) The system as set forth in claim 22 wherein said flexible lips are less than half the thickness of said main body portion.

24. (New) A method for transferring one of a plurality of tiers of pipette tip arrays from a vertically stacked orientation to an empty pipette tip holder, the pipette tips each having a lower tapered tip end and an upper mounting sleeve with a flat upper end and the pipette tip holder having a flat support surface provided with an array of openings adapted to receive and loosely hold the array of tips in a tip support position, said method comprising the steps of:

(1) providing a transfer plate having a flat body with an array of apertures arranged to align with the array of openings in the holder in a transfer position;

(2) forming each of the apertures with a flexible peripheral edge portion sized to support a pipette tip by its mounting sleeve with the tip end extending downwardly from the underside of the transfer plate body;

(3) supporting all but the lowermost transfer plate on the adjacent transfer plate of the tier immediately below with a transfer plate support structure formed integrally with an depending downwardly from the underside of the transfer plate to prevent supporting contact between vertically adjacent tips in the stacked orientation;

(4) positioning the transfer plate of the uppermost tier in the stack and the array of tips supported thereon over the holder with the tip ends extending into the openings and the support structure resting on the support surface to prevent supporting contact of the tips by the tip holder;

(5) engaging the mounting sleeves of the tips with a push plate having a plurality of downwardly depending protrusions corresponding to and alignable with the pipette tips in the transfer plate, said protrusions including shoulders adapted to engage the upper ends of said upper mounting sleeves; and,

(6) pushing the tips and the push plate protrusions through the apertures and causing the flexible edge portions to deflect downwardly until upper ends of the tips

and the shoulders are past the edge portions and the tips are free of the transfer plate to drop into the tip support position on the pipette holder.

25. (New) The method as set forth in claim 24 comprising the step of forming said flexible edge portions with a thickness less than half the thickness of the flat body.